

Work Order ID 142231

March 03, 2016 8:33:59 AM

142231

Page 1

Item ID: D5222-041 Accept ***N9000040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Wearplate Assembly
 Start Date: 3/2/2016 Start Qty: 8.00 ***8*** Cust Item ID:
 Required Date: 3/4/2016 Req'd Qty: 8.00 ***8*** Customer:
 Reference:

Approvals: Process Plan: SA Date: 20160303 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D5222	A								

110 Large Fab 0.00
110
 Large Fab Memo 0.05
 Large Fab 1-Weld D4379-5 cups as per dwg D3859
 A/R 316L stainless steel rod Batch: M123823

8 EL / 6-3-3

2-Weld hard facing as per Dwg D3859
 A/R 2059B Hard Coat rod Batch: A/30712
 *****use DT10124 for welding*****
 HARDFACING THICKNESS 0.130" MIN 0.190" MAX

120 QC9- Inspect visual per QSI004- Fusion Welds 0.00
120
 QC Memo 0.00
 Quality Control

(8) 1603-07 PD

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

March 03, 2016 8:34:00 AM

142231

Page 2

Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Start Date:	3/2/2016	Start Qty:	8.00	*g*
Required Date:	3/4/2016	Req'd Qty:	8.00	*g*

Cust Item ID:
Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run	Start	*NR1*
	Stop	*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

130	QC5- Inspect part completeness to step on W/O	0.00
-----	---	------

130

QC Memo

Quality Control

140 Identify as per dwg & Stock Location: ST/XX 0.00

140

Packaging

Packaging

150	QC21- Final Inspection - Work Order Release	0.00
-----	---	------

150

QC Memo

Quality Control

⑧ 16.03.07 PD.

8x. DAS 25 9-89 MAR 07 2016

ML5 MAR 08 2016

MCS MAR 08 2016

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause		FAULT CATEGORY					
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐		
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐		
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐		
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____					
Misidentified ☐	Past Due ☐						

Picklist Print

March 03, 2016 8:34:05 AM

Page 1

Work Order ID: 142231

142231

Parent Item: D5222-041

D5222-041

Parent Item Name: Wearplate Assembly

Start Date: 3/2/2016

Required Date: 3/4/2016

Start Qty: 8.00

Required Qty: 8.00

Comments: IPP REV:A 15.02.18 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D4379-5		Manufactured	No				Each	116.0000		32			
---------	--	--------------	----	--	--	--	------	----------	--	----	--	--	--

D4379-5

Wearplate Cup

EL 163-3

Location

Loc Qty

Loc Code

WA001

116

141277

36

141320

80

D5222-1

Manufactured No

Each

8.0000

8

D5222-1

Wearplate

EL 163-3

Location

Loc Qty

Loc Code

WA002

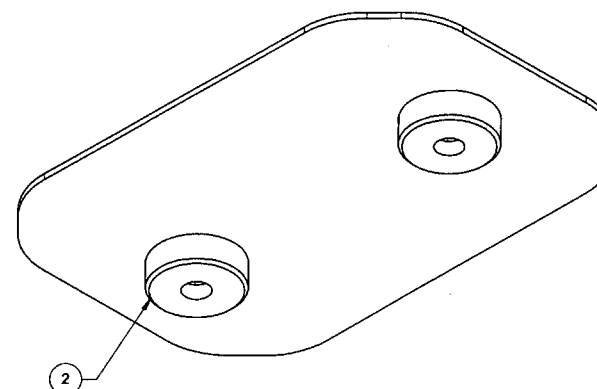
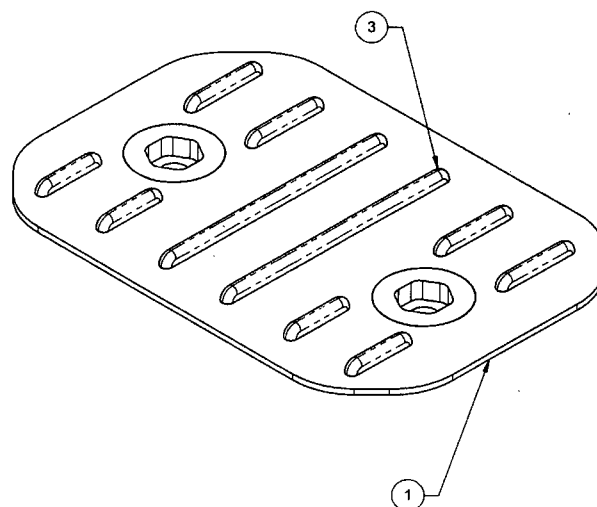
8

139318

8

8

ITEM	QTY -041	P/N	DESCRIPTION
X	X	D5222-041	WEARPLATE ASSEMBLY
1	1	D5222-1	R22 WEARPLATE
2	2	D4379-5	WEARPLATE CUP
3	A/R	2059B	HARDCOAT



D5222-041 WEARPLATE ASSEMBLY

20160303 RELEASED
2015 FEB 23
ECLN 15-524

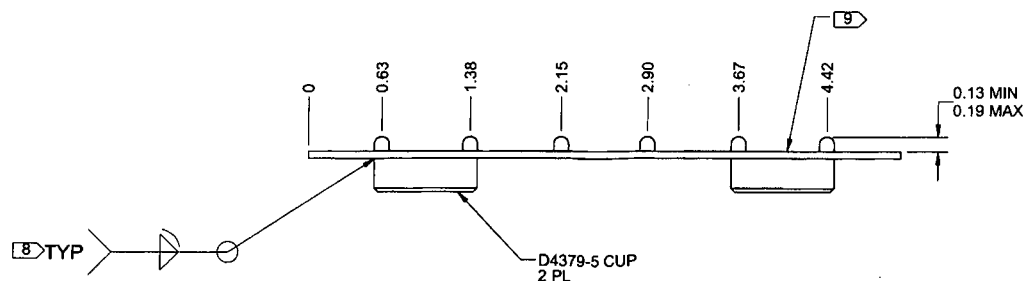
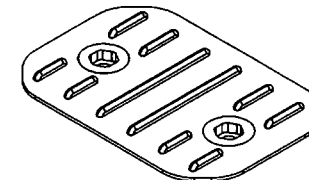
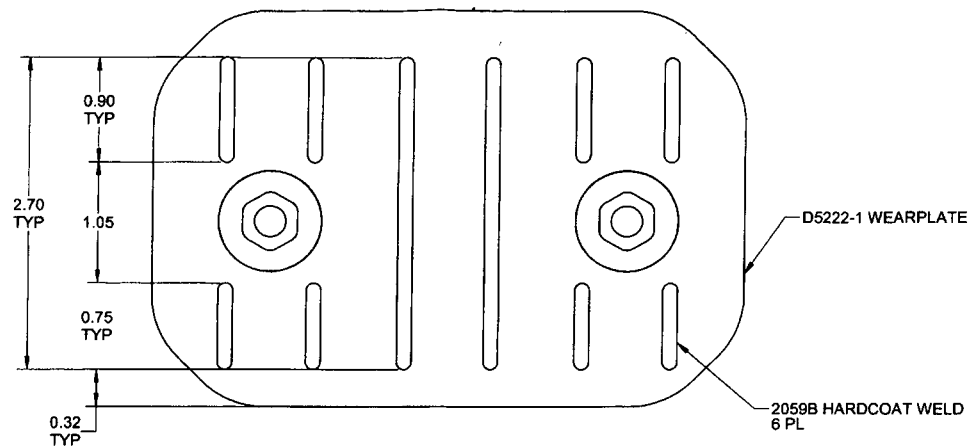
~~20151123~~

SH 142231

A		NEW ISSUE		VS	15.02.04
REV.	DESCRIPTION			BY	DATE
DESIGN	VS			DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D5222 TITLE WEARPLATE REV. A SHEET 1 OF 3 SCALE NTS	
DRAWN	VS				
CHECKED	RF				
MFG. APPR.	DD				
APPROVED	HS				
DE APPR.	DS				
DATE		15.02.04			

APPROVED

COPYRIGHT © 2015 BY DART AEROSPACE LTD
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS
NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT
WRITTEN PERMISSION FROM DART AEROSPACE LTD.



RELEASED

2015 FEB 23 *qp*

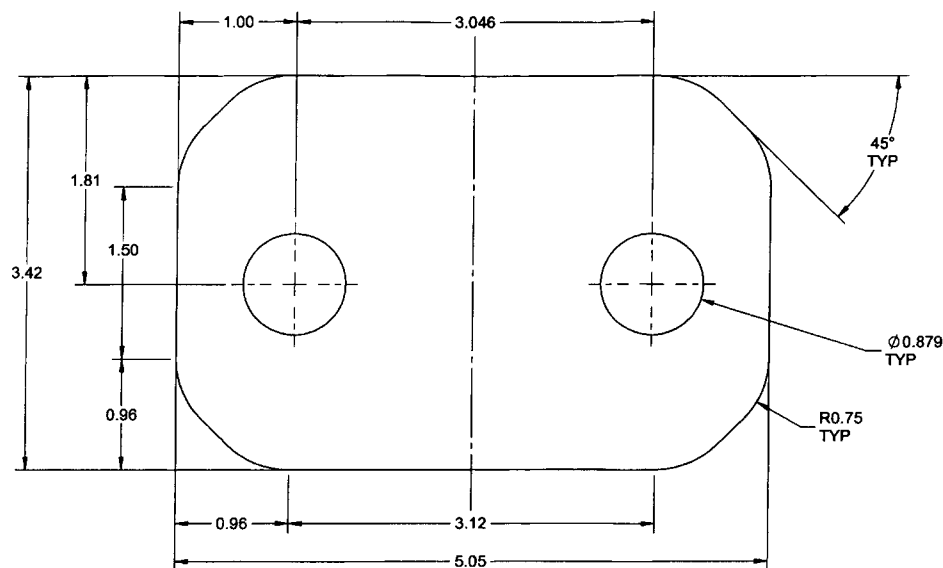
NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER DART QSI 044 6.1
- 7) WEIGHT: 0.42 lbs
- 8) WELDING PER QSI 004
- 9) D4379-5 FLUSH WITH SURFACE

**D5222-041 WEARPLATE
WELDING DETAIL**

APPROVED

DESIGN	VS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	VS		
CHECKED	RF	DRAWING NO. D5222	REV. A
MFG. APPR.	DD		SHEET 2 OF 3
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	WEARPLATE	NTS
DATE	15.02.04	COPYRIGHT © 2015 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



D5222-1 R22 WEARPLATE

RELEASED

2015 FEB 23 *q*

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET ANNEALED 2B FINISH, 16 GAUGE (0.063 THICK)
PER AMS 5513 (304) OR 5524 (316) OR ASTM A240 OR ASME SA240
REF DART SPEC M304S16GA
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.27 lbs

APPROVED

DESIGN	VS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	VS		
CHECKED	RF	DRAWING NO.	REV. A
MFG. APPR.	DD	D5222	SHEET 3 OF 3
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	WEARPLATE	NTS
DATE	15.02.04	COPYRIGHT © 2015 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	